

**Work Order ID 74103**

Page 1

Wednesday, September 21, 2011 1:28:40 PM

Item ID: D350-689-017

Accept



Setup Start



Revision ID:

Stop



Item Name: Shoulder Harness (4 point inertia reel)

Start Date: 9/28/2011 Start Qty: 2.00



Cust Item ID:

Required Date: 9/30/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals:

Process Plan:

Date: 10-21

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Draw Nbr

Revision Nbr

DSI 9499

A

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D350-689-017 CHG001

J 10/26/26

J 10/26/26 ML 11-9-26

110

0.00



Pick Kit

Packaging

Memo

0.00

Packaging

10/26/26 (2)

120

0.00



QC4- 100% Inspect kits for completeness

QC

Memo

0.00

Quality Control

J 11/4/26

(72)

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

**Work Order ID 74103**

Wednesday, September 21, 2011 1:28:40 PM

Page 2

Item ID: D350-689-017

Accept

Setup Start

Revision ID:

Stop

Item Name: Shoulder Harness (4 point inertia reel)

Start Date: 9/28/2011 Start Qty: 2.00

Cust Item ID:

Required Date: 9/30/2011 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

Stop

| Sequence ID/<br>Work Center ID  | Operation<br>Description  | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|---|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 130<br>  | Packaging   | 0.00                 |         |        |              |               |               |                  |                |
| Packaging   | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Packaging   | Identify and pack for shipping as per PPP D350-689-017<br>Location: <u>RAFT</u><br>PPP Rev: _____ |                      |         |        |              |               |               |                  |                |
| 140<br> | QC21- Final Inspection - Work Order Release   | 0.00                 |         |        |              |               |               |                  |                |
| QC  | Memo  | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control   |   |                      |         |        |              |               |               |                  |                |

10/9/29 (2)

11/9/27

MF  
11-09-27

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

Wednesday, September 21, 2011 1:28:48 PM

Page 1

Work Order ID: 74103

Parent Item: D350-689-017

Parent Item Name: Shoulder Harness (4 point inertia reel)

Start Date: 9/28/2011

Required Date: 9/30/2011

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A new issue DD 10.04.23 verified by:EC

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|

AN5-4A

Purchased

No

110

Each

80.0000

2

4

Bolt

Location

Loc Qty

Loc Code

ST337

80

108408

80

D4071-041

Manufactured

No

110

Each

8.0000

2

4

Shoulder Harness Assembly

Location

Loc Qty

Loc Code

ST266

8

69963

8

MS21042L5

Purchased

No

110

Each

1,287.000

2

4

Nut

Location

Loc Qty

Loc Code

ST300

1287

116105

5

116548

53

117441

343

117611

90

118179

496

118910

300

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries

# Picklist Print

Page 2

Wednesday, September 21, 2011 1:28:48 PM

Work Order ID: 74103



Parent Item: D350-689-017



Parent Item Name: Shoulder Harness (4 point inertia reel)

Start Date: 9/28/2011

Required Date: 9/30/2011

Start Qty: 2.00

Required Qty: 2.00

NAS1149D0516J

Purchased

No

110

Each

135.0000

4

8



Washer

*Peu/9/26*  
*(2)*

Location

Loc Qty

Loc Code

ST298

135

114797

135

*114797*

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

**NOTE:** Date & initial all entries



# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-689 REV. A  
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-689 REV 0

REF TCCA STC: SH02-33  
REF FAA STC: SR01620NY  
REF EASA STC: EASA.IM.R.S.01453  
REF BRAZILIAN STC: 2005S03-09

REFERENCE ONLY

## PURPOSE:

TO PROVIDE AN OPTIONAL SHOULDER HARNESS KIT TO BE INSTALLED ON THE D350-689-011/-021 DUAL HIGH BACK SEAT INSTALLATIONS.

## CHANGE:

ADD OPTIONAL D350-689-017 SHOULDER HARNESS KIT (4 POINT INERTIA REEL) TO PARTS LIST OF IIN-D350-689 REV A AND ICA-D350-689 REV 0 AS DETAILED BELOW.

## PARTS LIST:

| Qty<br>-017 | Part Number   | Description                                 |
|-------------|---------------|---|
| X           | D350-689-017  | SHOULDER HARNESS KIT (4 POINT INERTIA REEL) |
| 2           | D4071-041     | SHOULDER HARNESS ASSY                       |
| 2           | AN5-4A        | BOLT  |
| 4           | NAS1149D0516J | WASHER                                      |
| 2           | MS21042L5     | NUT (OR MS21042-5)                          |

## INSTRUCTIONS:


TO INSTALL D350-689-017 SHOULDER HARNESS KIT:





1. DRILL Ø0.323 HOLES AS INDICATED ON SHEET 2, DETAIL "A" OF THIS SERVICE INSTRUCTION FOR THE INERTIA REEL. DEBURR AND TOUCH UP DRILLED HOLES AS INDICATED ON IIN-D350-689 SECTION 3.1 ITEM 5 (PG 4).
3. GUIDE SHOULDER HARNESS WEBBING THRU D3031-1 LOOP BY REMOVING LOOP FIRST, POSITIONING WEBBING AND FINALLY REPLACING D3031-1 LOOP. TORQUE FASTENERS TO 15-25 in-lbs.
4. INSTALL INERTIA REEL OF D4071-041 HARNESS ASSY USING THE HARDWARE PROVIDED AS PER FIGURE 1 (SHEET 2). ALIGN INERTIA REEL TO ENSURE WEBBING IS STRAIGHT. TORQUE FASTENERS TO 100-140 in-lbs.
5. REPEAT STEPS 3 & 4 FOR THE SECOND SHOULDER HARNESS.
6. INSTALL D4071-041 LAP BELT ASSY (QTY 2) USING EXISTING HARDWARE PROVIDED WITH D350-689-041/-043 DUAL HIGH BACK SEAT ASSEMBLY. SEE FIGURE 2 (SHEET 2) FOR REFERENCE.

## WEIGHT AND BALANCE:

| Installation  | Weight            | LATERAL             |                            | LONGITUDINAL      |                        |
|---|-------------------|---------------------|----------------------------|-------------------|------------------------|
|   |                   | Arm                 | Moment                     | Arm               | Moment                 |
| D350-689-017 SHOULDER HARNESS KIT (Seat's Fwd position) | 4.4 lb<br>2.00 kg | -18.2 in<br>-0.46 m | - 80.1 in-lb<br>-0.92 m-kG | 60.7 in<br>1.54 m | 267 in-lb<br>3.08 m-kG |
| D350-689-017 SHOULDER HARNESS KIT (Seat's Aft position) | 4.4 lb<br>2.00 kg | -18.2 in<br>-0.46 m | - 80.1 in-lb<br>-0.92 m-kG | 64.7 in<br>1.64 m | 285 in-lb<br>3.28 m-kG |

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED  
BY:   
D. SHEPHERD (DE # 02)  
DATE: 10.04.13  
CERT. NO.: SH02-33  
ISSUE NO.: 1

|            |   |  |              |
|------------|---|--|--------------|
| A          | NEW ISSUE.  | JPH  | 10.04.13     |
| REV.       | DESCRIPTION   | BY   | DATE         |
| DESIGN     |  | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA   |              |
| DRAWN      |  |  |              |
| CHECKED    |  | DRAWING NO.  | REV. A       |
| MFG. APPR. | N/A   | DSI 9499   | SHEET 1 OF 2 |
| APPROVED   |  | TITLE  | SCALE        |
| DE APPR.   |  | SHOULDER HARNESS KIT   | NTS          |
| DATE       | 10.04.13  | COPYRIGHT © 2010 BY DART AEROSPACE LTD<br>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. |              |